

REPORT

OF THE

TWENTY-SEVENTH ANNUAL MEETING

OF

THE OHIO ACADEMY OF SCIENCE

The Twenty-seventh Annual Meeting of the Ohio Academy of Science was held at Ohio State University, Columbus, Ohio, April 6 and 7, 1917. In the absence of the president, Professor F. O. Grover, of Oberlin College, Professor Stephen R. Williams, of Miami University, vice-president for Zoology, presided over the meeting. Fifty-one members registered in attendance.

GENERAL PROGRAM

FRIDAY, APRIL 6

- 9:00 A. M.—Business Meeting.
- 10:00 A. M.—Reading of Papers in General Session.
- 11:45 A. M.—Illustrated Lecture by Professor Robert F. Griggs, of Ohio State University: "Recent Explorations of Mt. Katmai, Alaska." In Place of Presidential Address on "Some Phases of Present Day Biological Unrest," by Professor F. O. Grover, of Oberlin College, whose attendance was prevented by illness.
- 12:15 P. M.—Lunch, Ohio Union.
- 1:30 P. M.—Reading of Papers in General Session.
- 3:00 P. M.—Reading of Papers, in Sectional Meetings.
- 5:45 P. M.—Dinner, Ohio Union.
- 7:30 P. M.—Public Lecture by Professor James R. Withrow, of Ohio State University: "The Relation of War to Chemistry in America."

SATURDAY, APRIL 7

- 9:00 A. M.—Adjourned Business Meeting.
- 10:00 A. M.—Reading of Papers in Sectional Meetings.

MINUTES OF BUSINESS MEETINGS

The first business session was called to order by Vice-President Williams at 9:00 A. M., on Friday, April 6. An adjourned session was held at 9:00 on the following morning.

The appointment of the following committees for the meeting was announced by the chair:

Committee on Membership—M. E. Stickney, A. W. Smith, F. L. Landacre.

Committee on Resolutions—E. L. Moseley, L. B. Walton, C. G. Shatzer.

Committee on Necrology—G. D. Hubbard, Herbert Osborn, A. D. Cole.

The following Auditing Committee was elected by the Academy: L. B. Walton, C. G. Shatzer.

The following Nominating Committee was elected by the ballot of the Academy just before the close of the first business session: L. B. Walton, G. D. Hubbard, A. D. Cole.

Report of the Secretary

The following report by the Secretary, read by the Acting Secretary, was received and ordered filed:

CAMBRIDGE, MASS., March 31, 1917.

To the Ohio Academy of Science:

The work of the Secretary for the past year has consisted mainly of routine work, largely in co-operation with the Executive and Program Committees.

A brief report of the Twenty-sixth Annual Meeting, 1916, was published in *SCIENCE*, July 28; the full report appeared in the *OHIO JOURNAL OF SCIENCE* for January. Notices of the present meeting have been sent to the leading dailies in Columbus, Cleveland, Cincinnati, and Toledo.

The officers of the Academy were notified of their election; and the relevant portions of the report of the Committee on Resolutions were transmitted to all persons and organizations receiving recognition in that report.

The Program Committee is to be congratulated on securing the services of Prof. Withrow for the Friday evening address. Prof. Withrow is giving this very timely address at serious personal inconvenience. His loyalty to the Academy and the spirit of national patriotism by which he is actuated should receive the fullest recognition of the Academy.

The gratitude of the Academy is also due to Prof. Griggs for his kindness and telegraphic promptness in filling in the gap in the program caused by the illness and absence of the President.

Two minor matters concerning the make-up of the program may well be mentioned here. Some members may be disappointed to find their papers scheduled for sectional meetings rather than general sessions; this has been necessitated by the presentation of an unusual number of titles of a general character. There have been presented, also, an unusually large number of titles unaccompanied by specifications as to time needed. This causes no inconsiderable complication in the arrangement of the program. A uniform allowance of ten minutes has been made in such cases; for the future the secretary would recommend the reduction of this allowance to five minutes.

During the past year the Secretary has prepared a card catalog of the membership of the Academy, past and present, with record of dates of admission and withdrawal. Some inaccuracies (due largely to variation in spelling and to change of name on the part of the ladies) are still to be corrected; but the following summary is approximately correct, and may be of interest to the members:

Ex-Members.....	455
Present Members.....	265
Total.....	720

The preparation of this catalog has made possible the record in the published membership list of the dates of admission to the Academy. The Secretary will be grateful for the correction of any errors which may have slipped into this record.

Preliminary steps have been taken this year looking toward the establishment of sections for Psychology and Chemistry; and it is hoped that another year may see these sections organized. The secretary has also very recently received the suggestion of the desirability of a section for the medical (or near-medical) sciences—Anatomy, Physiology, and Pathology. The program of this meeting shows the justification for this suggestion.

Some complications have arisen because of the Secretary's temporary absence from the state, but it is confidently expected that the very efficient work of Prof. Kreckler as chairman of the Local Committee and of Prof. Westgate as Acting Secretary for the meeting will prevent any loss to the Academy.

Respectfully submitted,

EDWARD L. RICE, *Secretary*.

Report of the Treasurer for the Year 1916-17

The report of the Treasurer was received as follows, and referred to the Auditing Committee, whose report is appended.

For the year since our last annual meeting, the receipts, including balance from last year, have amounted to \$590.73, and the expenditures to \$451.63, leaving a cash balance of \$139.10.

RECEIPTS

Balance from last year.....	\$298.13
For sale of publications.....	22.60
Membership dues.....	270.00
	<hr/>
	\$590.73

EXPENSES

Miscellaneous expenses.....	\$ 48.88
180 subscriptions to the Ohio Journal of Science.....	180.00
Publishing Annual Report of the 25th meeting.....	222.75
Balance, April 6, 1917.....	139.10
	<hr/>
	\$590.73

Respectfully submitted,

JAS. S. HINE, *Treasurer*.

April 7, 1917.

The Auditing Committee has verified the receipts and expenditures of the Treasurer of the Academy, Professor J. S. Hine, and finds that they are correct.

L. B. WALTON
C. G. SHATZER.

Report of the Executive Committee

The report of the Executive Committee was received as follows and ordered filed.

CAMBRIDGE, MASS., April 2, 1917.

To the Ohio Academy of Science:

The Executive Committee has held but one meeting during the year, on January 27. The officers of the Academy were invited to meet with the Committee. Profs. Hine, Walton and Rice, of the Committee were present, together with Profs. Foerste, Osborn, Schaffner and Westgate by invitation.

It was decided to hold the annual meeting on April 6 and 7, in Columbus.

The Program Committee was instructed to arrange an independent session of the Academy for Saturday morning, and to arrange for a joint meeting with the Ohio College Association for Friday evening *only* in case of agreement upon a distinctively scientific address. (When Prof. Withrow accepted the invitation to speak at the Friday evening meeting, an invitation was extended to the Ohio College Association to join with the Academy; but other arrangements had already been made.)

Dr. Mendenhall was appointed to fill the vacancy in the Board of Trustees of the Research Fund caused by the death of Prof. Lazenby; and Prof. Fenneman was requested to serve as chairman of the Board.

Prof. Westgate was appointed as Acting Secretary to serve during the absence of the Secretary.

The following communication from the Ohio State University Scientific Society was presented by the Secretary:

Columbus, May 29, 1916.

*Professor E. L. Rice, Secretary Ohio Academy of Science,
Ohio Wesleyan University, Delaware, Ohio:*

DEAR PROFESSOR RICE:—At the last meeting of the Ohio State University Scientific Society it was unanimously voted that the Ohio Academy of Science be requested to name "a representative of each section of science represented in the Academy (Zoology, Botany, Geology, Physics), to serve on the Editorial Board of the Ohio Journal of Science," such representatives (four in all) not to be members of the Ohio State University Scientific Society.

Will you be so kind as to notify such officers of the Academy as should receive this announcement.

Sincerely yours,

R. J. SEYMOUR, *Secretary.*

Owing to the near approach of the annual meeting, no formal action was taken by the Committee, but the appointment of representatives was left to the Academy as a whole.

In November, 1916, the Executive Committee decided by correspondence to join with other organizations in extending an invitation to the Central Association of Science and Mathematics Teachers to meet in Columbus next Thanksgiving. The following letter from the President of that Association should be presented to the Academy:

COLUMBUS, March 21, 1917.

E. L. Rice, Secretary, The Ohio Academy of Science, Delaware, Ohio:

MY DEAR MR. RICE:—You will recall that your organization joined with a number of other organizations of the state in extending to the Central Association of Science and Mathematics Teachers an invitation to hold the next meeting in Columbus. The Central Association will meet in Columbus, November 30 and December 1, 1917. I take this means of suggesting to you that the Association will deeply appreciate any co-operation you may find it possible to give.

There will be a general meeting on Friday morning to which all are invited and at which a Science address will be made in addition to a general educational address. On Friday afternoon the sectional meetings will be held. On Friday evening there will be a banquet followed by detailed reports of plans for science and mathematics work in "The High School of To-morrow." On Saturday morning the general business meeting is held, followed by excursions to various places of interest in or near Columbus.

The Association invites you to be present and to take part in any and all of these meetings. The inspiration of this large body of teachers should be of great benefit to every similar organization in the state. Let us make this the biggest Science and Mathematics meeting ever held in Ohio.

Plan now to be present at the November meeting.

Yours very truly,

MARIE GUGLE, *President.*

This invitation has been acknowledged by the Secretary.

A single application for membership has been approved by the Executive Committee, and will be presented later for the ratification of the Academy.

Respectfully submitted,

EDWARD L. RICE,
Sec'y for Committee.

Report of the Publication Committee

The report of the Publication Committee was received as follows and ordered filed.

The committee has published the Report of the Twenty-fifth Annual Meeting, consisting of 202 pages and also the Report of the Twenty-sixth Annual Meeting, consisting of 26 pages. The first report was published at a cost of \$222.75, and the twenty-sixth, which was a partial reprint from the Ohio Journal of Science, at a cost of \$42.00.

The method of publication of the Proceedings of the Annual Meetings was not fully determined at the last meeting. The Executive Committee having been given power to act on its own initiative. After correspondence with members of the Executive Committee it was thought best to publish the Annual Report as heretofore, the first twelve pages consisting of list of officers and members, being set up separately, and the Secretary's Report reprinted from the Journal of Science. It was not thought necessary to reprint the President's address, since this will now be published regularly in the Ohio Journal of Science.

The committee recommends that the Proceedings of the Academy be handled in the regular way as heretofore, and that the Annual Report mainly a reprint from the Ohio Journal of Science, consisting of lists of officers and members, and the Secretary's Report be continued. The committee strongly urges that the publication of special papers be continued also and that if possible at least one be published each year.

Respectfully submitted,

JOHN H. SCHAFFNER, *Chairman*,
L. B. WALTON.

Report of the Emerson McMillin Research Fund

The following report of the Trustees of the Research Fund was received and referred to the Auditing Committee, whose report is appended.

April 5, 1917.

RECEIPTS

Balance April 21, 1916.....	\$308.41
Check from Emerson McMillin.....	250.00
	<hr/> \$558.41

EXPENDITURES

Forest B. N. Brown.....	\$ 46.25
B. H. Wells.....	40.00
W. L. Du Bois.....	21.50
Stephen R. Williams.....	41.69
Wm. M. Barrows.....	19.60
Balance in Bank.....	389.37
	<hr/> \$558.41

N. M. FENNEMAN.

April 7, 1917.

No report on the McMillin fund by the Auditing Committee is possible, inasmuch as vouchers, paid checks, and bank book are not submitted.

L. B. WALTON,
C. G. SHATZER.

Report of the Library Committee

For the Library Committee, Mr. Reeder, of the Ohio State University Library, presented the following report, which was received and ordered filed.

To the Ohio Academy of Science:

The Ohio State University Library begs to report that it has cared for all the accessions to the Library of the Academy, which have been received during the year 1916-17. The number of publications is not large, aggregating about one hundred (100) items.

During the year the annual reports of the twenty-fifth and twenty-sixth meetings of the Academy, for 1915 and 1916, were published. Copies were mailed to all members whose names appeared in each report and to all exchanges.

The sale of publications for the year has amounted to \$22.60. This sum has been turned over to the Treasurer.

The librarian desires to raise three questions on which he would like a vote of the Academy:

1. Is there any policy regarding the number of copies of a Special Paper which may be presented to the author? Request was made during the year, by an author, for copies of his publications. Under existing arrangements the only disposition is by sale, after distribution has been made to the membership and to the exchanges.

2. Is there any policy regarding the reprinting of Special Papers, which are nearing exhaustion? Special Paper No. 15, "Trees of Ohio and Surrounding Territory," by J. H. Schaffner, is almost gone, there being only seven copies in stock. A request for eighteen copies for use in a university had to be turned down.

3. Is the Academy ready to take a further step in the management of its library and turn its collection over to the Ohio State University for incorporation with the other sets and books on scientific subjects?

In the original agreement between the Academy and the University, adopted November, 1914, it was stated in article 3, that "for the time being" the library of the Academy should be kept as a separate collection. This has been done. In article 4, it was stated that "ultimately it is mutually agreed that the library of the Academy shall be classified with, and distributed in the University Library."

The question is: Is the Academy ready to take this step at this time? The University Library is ready.

As bearing on this proposition, the following statements are submitted:

(a) The Ohio Journal of Science is receiving a subsidy from the University. In return for this annual grant, the University Library receives 250 copies of each issue for exchange purposes. At the present time, some 230 societies and periodicals are on the exchange list. Furthermore, the Biological Club has turned over to the University Library all the exchanges received by the Ohio Naturalist from 1900 to 1915. This material has been bound, catalogued and classified by the Library.

(b) Some confusion exists between the two sets of exchanges, those received by the Academy and those received by the Library through the Ohio Journal of Science. If the proposed step is taken, the two sets of exchanges can be unified and duplication eliminated, both in sending and in receiving.

(c) If the proposed step is taken, the duplicates found in the Academy's collection can be used to secure other sets not now in the possession of either the University or the Academy, or they can be sent to other Ohio libraries as the Academy may decide.

(d) The University Library has been purchasing from its book budget, many new sets and filling in the gap in existing sets. If the Academy's collection is turned over, a number of its sets can be completed through purchase, something the Academy cannot afford to do. Furthermore, there will be no chance for duplication or waste in money, when the complete sets are purchased by the University of which the Academy has a partial or incomplete file.

(e) The University Library is unifying other exchanges received and distributed by the University, such as the Ohio History Teacher's Bulletin, the Contributions from the Department of Zoology and Entomology, the Doctoral Dissertations, and the proposed series of studies to be issued by the Graduate School. If the Academy agrees to the proposition put forward, all readjustments can be made while the work is being done on these other series, and the entire question of exchanges can be settled.

(f) The result of favorable action on the part of the Academy will be advantageous to both parties, because the members of the Academy will get improved library facilities through a better handling of its own sets and exchanges and the University Library will be in a better position to unify its collections, to plan its purchase of sets and of "fill ins" and to develop systematically, its entire system of exchanges.

Respectfully submitted,

April 6, 1917.

C. W. REEDER.

Mr. Reeder was requested to make specific recommendations on the subjects treated in this report. This was done at the second business session. In accordance with the recommendations of Mr. Reeder, the following actions were voted by the Academy:

1. That fifty copies of each special publication of which copies are now on hand or which may be published in the future shall be given free to the author. (It is understood that any copies already given shall count on this number.)

2. That the library of the Ohio Academy of Science be turned over to the Ohio State University for incorporation in The Ohio State University General Library.

3. That a special card catalog be kept of the books thus received by the Ohio State University Library from the Academy.

4. That a suitable printed plate, to be paid for by the Academy, be put in the books given to the Ohio State University Library.

Report of the Committee on Legislation

An oral report was presented by the chairman, Dr. Mendenhall. The report was received and the Committee continued.

Report of the Committee on the Ohio Journal of Science

No report was presented. The question at issue has practically solved itself, and the general satisfaction with the present relations of the Academy and the Ohio Journal of Science renders further work by the committee unnecessary.

Report of Committee on Catalog of Scientific Journals

The following report was presented by Mr. Reeder, of the Ohio State University Library, for the Committee on Catalog of Scientific Journals. The report was received and ordered filed.

The Committee on the Union List of Scientific Periodicals begs leave to submit the following report:

Twenty-one Ohio libraries are now pledged to assist in the union catalog. Three additional libraries have agreed to join the movement during the past year—Cincinnati University, Kenyon College, and Otterbein College. Of these co-operating libraries, complete or partial deposits have been made by nine, namely:

Case School of Applied Science.

Kenyon College.

Lloyd Library.

Municipal University of Akron.

Oberlin College.

Ohio Archæological and Historical Society.

Ohio State University Library.

Otterbein College.

Wittenberg College.

All cards so far deposited, have been arranged in one alphabet, after each card has been marked to show the owner library. In order to ascertain the work done during the year by the co-operating libraries which had not made deposits, a request was sent to each one asking for a statement of progress. Following are excerpts from the replies received:

Adelbert College of Western Reserve—Beginning in October, an assistant has given about half-time to the preparation of the records. The periodicals of the Reference Department and the 000 numbers of the Circulating Department are practically completed, making about 350 titles. Work is now proceeding on the 100's.

Antioch College—The librarian expects to get the records completed within a reasonable time.

Cincinnati University—This library contains the exchange deposit of the American Association for the Advancement of Science. Not much, if anything, can be done on the records until the work eases up a little.

Cleveland Public Library—Cards for about 550 titles are ready. These are for such titles as happen to be catalogued or recatalogued, so nothing has been done along any special line.

Hebrew Union College—No progress has been made in the preparation of the records.

Miami University—The staff work has been interrupted by sickness and leaves of absence, so no progress whatever has been made.

Ohio State Library—The larger part of the records of periodicals has been corrected and brought down to date, so the deposit is nearly ready for submission.

Ohio University—Members of the staff have been away, so nothing has been done on the records.

Ohio Wesleyan University—Owing to lack of sufficient staff to give it attention, not much progress has been made. However, the list of cards has been prepared for the bound volumes down to J. It is barely possible that a special worker can be put on these records and complete them in the near future.

Toledo Public Library—Press of work has prevented progress on the records.

Young Men's Mercantile Library Association—Few of our magazine sets have ever been more than arranged on the shelves. Fifty-one sets have been shelf-listed and catalogued and cards for these will be forwarded within the near future. Thirty-four sets have been shelf-listed only and will be catalogued as time permits.

No word was received from the Cincinnati Public Library and Hiram College.

The Academy is aware that the College Section of the Ohio Library Association is co-operating in this work. A full and detailed report was made at its meeting on October, 1916. It was voted at that time to continue the compilation on the lines already laid down and rush the union list to completion as quickly as the time and resources of each individual library permitted.

However, a phase has developed to the Ohio situation which needs thorough consideration. The university libraries of the middle west have projected a Union List which is to include Nebraska, Minnesota, Wisconsin, Iowa, Illinois, Michigan, Ohio and the metropolitan districts of St. Louis and Chicago. The plans for this list have been laid by the H. W. Wilson Co., the estimates of printing made and the copy from nearly all the libraries is ready. Consideration is now being given to the time limit, so the publication may proceed.

Here are some problems for Ohio:

(1) Shall we ask for the inclusion of the Ohio Union list in the proposed "North Central List?"

(2) Is the Academy ready to finance the inclusion of its list, on the basis of what other co-operators will pay?

(3) If the Academy does not finance the proposition, shall we ask each library to finance its own contribution to such a list, or buy its quota of volumes?

(4) When the "North Central List" is published, will there be need for an exclusive Ohio List?

The committee recommends that, in spite of the complication of the situation, work be continued on the distinctively Ohio List and that the relation of the Ohio proposition to that of the universities of the Middle West be held in abeyance until many of the details of the larger union list are definitely settled.

C. W. REEDER.

April 6, 1917.

The following actions were voted by the Academy:

1. That the recommendations contained in the report of the Committee on Catalog of Scientific Journals be adopted.

2. That the Committee on Catalog of Scientific Journals be discharged, and that the work formerly done by this committee be transferred to the Library Committee.

Election of Officers

From the double slate of nominations prepared by the Nominating Committee, the following officers for 1917-18 were elected by the ballot of the Academy:

President—Professor F. L. LANDACRE, Ohio State University, Columbus.

Vice-President for Zoology—Professor C. G. SHATZER, Wittenberg College, Springfield.

Vice-President for Botany—Professor FRED A. DETMERS, Ohio State University, Columbus.

Vice-President for Geology—Professor G. F. LAMB, Mt. Union College, Alliance.

Vice-President for Physics—Professor SAMUEL R. WILLIAMS, Oberlin College, Oberlin.

Vice-President for Anatomy, Physiology, etc.—Professor R. J. SEYMOUR, Ohio State University, Columbus.

Secretary—Professor E. L. RICE, Ohio Wesleyan University, Delaware.

Treasurer—Professor J. S. HINE, Ohio State University, Columbus.

Elective Members of Executive Committee—Professor C. G. SHATZER, Wittenberg College, Springfield; Professor FRANK CARNEY, Denison University, Granville.

Member of Publication Committee—Professor L. B. WALTON, Kenyon College, Gambier.

Trustee of Research Fund—Professor HERBERT OSBORN, Ohio State University, Columbus. (The resignation of Professor M. M. METCALF was presented, and the Chair was instructed to appoint a trustee to fill the vacancy until the next Annual Meeting. Chair appointed Professor M. E. STICKNEY, Denison University, Granville.)

Member of Library Committee—Professor F. O. GROVER, Oberlin College, Oberlin.

On nomination from the floor, the following were elected to represent the Academy on the editorial board of the Ohio Journal of Science:

Zoology—Professor R. A. BUDINGTON, Oberlin College, Oberlin.

Botany—Professor M. E. STICKNEY, Denison University, Granville.

Geology—Professor G. D. HUBBARD, Oberlin College, Oberlin.

Physics—Professor S. J. M. ALLEN, University of Cincinnati, Cincinnati.

Anatomy, Physiology, etc.—Professor F. C. WAITE, Western Reserve University, Cleveland.

Election of Members

The Membership Committee reported ten names for election to membership; one additional name, previously approved by the Executive Committee and marked with * in the following list, was presented for ratification. All were elected, as follows:

Brooks, Clyde, Physiology, Physiological Chemistry, Pharmacology, O. S. U., Columbus.

Cameron, Hazel C., Pathology, 1234 Highland St., Columbus.

*Eggleston, H. Ray, Botany, Zoology, Paleontology; Marietta College, Marietta.

Faulkner, Herbert C., Entomology, Biology; 2 Val. View Boulevard, Ashtabula.

Huber, H. E., Biology; Ohio Northern University, Ada.

Hugger, Carl Claron, Pathology; 710 N. Park St., Columbus.

Kisliuk, Max, Jr., Zoology, Entomology, Botany; Botany and Zoology Bldg., O. S. U., Columbus.

McCaughy, W. J., Mineralogy; Lord Hall, O. S. U., Columbus.

Orcutt, Ruth; Botany, Zoology; Granville.

Speaks, John C., Ichthyology, Ornithology; Columbus.

Yampolsky, Cecil, Botany, Zoology, Genetics; Toledo University, Toledo.

The Report of the Committee on Necrology

The following report was presented by the Committee on Necrology:

Not often does it fall to the Academy to record the loss of two leading members and past officers within one year. Within three days, Sept. 11 and Sept. 14, there occurred the deaths of Professor Charles Smith Prosser and Professor William Rane Lazenby. In many points their lives had run in similar ways; both born as farmer's sons in central New York, both graduates of Cornell University, both of necessity in part working their way through, both retained for a number of years by the University as assistants in their respective fields, both subsequently called to Ohio State University as heads of their respective departments, both loyal members of the Sigma Xi, and both active through their entire scientific careers in painstaking research and conscientious teaching.

Professor Lazenby was born in 1850 at Bellona, N. Y. He was graduated from Cornell University in 1874, at which time he won the Ezra Cornell prize in Agriculture. He was Instructor in Horticulture and Botany, '74-'77 and Assistant Professor, '77-'81 at Cornell; Professor of Botany and Horticulture, '81-'92, of Horticulture and Forestry, '92-'08, and of Forestry at Ohio State University from that date to his death. He was founder and for five years director of the Ohio Experiment Station, an institution which has been a very important factor in the agricultural development of his adopted state.

He was an active member of many scientific organizations, among which are:

- American Association for the Advancement of Science (twice Secretary and once Vice-President of Section I);
- Society Horticultural Science;
- American Pomological Society;
- American Forestry Society (Vice-President many years);
- Society for Promotion of Agricultural Science (Secretary five years and President two years);
- Ohio Academy of Science (founder and President, '02);
- Ohio Forestry Society (President, '04 to date of his death).

His activity in these organizations grew out of a keen interest in them, their members and their ideals, an interest which expressed itself in wise counsel, frequent contributions to their programs, and discussions of the papers of others.

Teaching was his main business during the college year, but his summers were always spent in travel and investigation; several were spent in Europe, studying her forests and forestry methods.

His publications include many contributions both to Scientific Journals and State reports and to the semi-popular and popular press.

In the words of a close friend at Cornell: "While he found his great interest in life, the mastery and development of his special field in science, it was the human side of him that had the strongest hold on his friends and colleagues. He never lost his interest in the struggles

of students with limited means, and in a quiet way extended aid to many of them. He never lost an opportunity for service to his friends or others in need; sympathy, helpfulness and loyalty were his characteristic qualities as a man and friend; and the loss to all of us who knew and loved him is irreparable."—J. H. Cornstock, *Science*, December 29, 1916, p. 913.

Hundreds of students now scattered to all parts of the country have sat at his feet, and can testify to the quiet, unassuming scholarship and sympathetic instruction to which they were there exposed. Many have attained to eminence in horticulture and forestry through the working out of the interest and enthusiasm he engendered.

As a member of the Academy he was practically always at its meetings with an important contribution to make. His presentation was always interesting and plain. Continually alert for opportunities by which the Academy could serve the Commonwealth and Science, he became the channel through which we received our annual, financial aid for research from our loyal patron and life member, Mr. Emerson McMillin. He served on the trustee committee from 1901 to the time of his death and wisely discharged his duties.

If any difficult problem arose in the affairs of the Academy he was not lacking in efficient counsel nor was it hastily or injudiciously given. Thus we shall miss his thoughtfulness and wisdom.

Professor Prosser was born in 1860 at Columbus, New York. He was graduated from Cornell University in 1883, was a fellow one year and instructor to 1888; received his master's degree in 1886 and returned twenty years later and took his doctor's degree in 1907. One year before Union College gave him an honorary Doctorate of Science.

He was professor of Natural History at Washburn, Kansas, '92-'94, of Geology at Union, '94-'99, Associate Professor of Historical Geology, '99-'01 at Ohio State University and Professor and Head of the Department from then to the date of his death. For four years after leaving Cornell University he was Assistant Paleontologist on the U. S. Geologic Survey, Assistant Geologist '92-'95 and '00-'16. He was a member of the N. Y. Geological Survey, '95-'99; Kansas Geological Survey, '96, Chief Appalachian Division, Maryland Geological Survey, '98-'01; Assistant Geologist, Ohio Geological Survey, '00-'16.

He was a member of the leading Geological and Scientific Societies of America and of some foreign organizations, among which are the following:

- International Congress of Geologists, London, 1888;
- International Geographic Congress, New York, 1904;
- Fellow American Association Advancement Science (Vice-President, Section E, at the time of his death);
- Society of Naturalists;
- Society of Vertebrate Paleontologists;
- Geological Society of America;
- Paleontological Society of America;
- National Geographic Society;
- Geologische Verein;
- Washington, D. C., Kansas and Ohio Academies of Science.

While teaching was the chief business of Dr. Prosser during practically his whole public life, his vacations and all spare time during the school year were devoted to research. He loved it and was willing to sacrifice much to attain his goals in his scientific career.

His contributions were always marked by most painstaking and precise accuracy in the fields they covered and thus left little for anyone else to do when he had finished.

Among his publications are extensive papers and reports on the geology and paleontology of New York, Maryland, Kansas, and Ohio. They are largely stratigraphic and paleontologic, and are particularly strong in the correlations which they set forth.

The State Geologist of New York, with whom Professor Prosser had long been associated, gives a beautiful estimate of him in the following words:

"There never was a more loyal, a more devoted, a more sensitive spirit. His attitude of mind was puritanic in its simplicity and in its practices, and, left to himself he could never suspect another of indirectness or duplicity—a quality of which he contained not a grain. When confronted by the broader bearings of his science and the natural sequences of its greater propositions, he held himself somewhat carefully aloof. Yet this simplicity of heart which would not let him go far afield, also made him extraordinarily conscientious in his scientific work. It would not be fair to him to say that he had a genius for details, but it would be eminently right to assert that he sought intimately and faithfully for the exact construction of every observation he made so far as that had to do with the theme in hand. This mental method led him to a precision of manner and gave him a certain formality which was seldom dismissed under the most informal circumstances."—J. M. Clarke, *Science*, October 20, 1916, p. 559.

Many men and women have gone out from under his training, in Kansas, New York, and Ohio, who can trace their geological ideals and beginnings to him. Some have attained to eminence in geologic and paleontologic research or in teaching and uphold the high standards to which he was devoted.

(Signed) GEO. D. HUBBARD, *Chairman*,
HERBERT OSBORN.

Report of the Committee on Resolutions

The following report was presented by the Committee on Resolutions, and adopted by the Academy.

1. The Academy wishes again to express its gratitude for the continued generosity of Mr. Emerson McMillin, and to put on record its appreciation of the value of his gifts to the Research Fund in the stimulation and extension of research on the part of the membership of the Academy.

2. The Academy desires to express sympathy for Professor F. O. Grover, whose illness, brought on by overwork, has prevented him from

attending and presiding as president at this meeting. It is to be hoped that he may offer for publication the address he had expected to give.

3. Professor Robert F. Griggs is entitled to the thanks of the Academy for his very interesting illustrated lecture on his recent "Explorations of Mount Katmai, Alaska."

4. The thanks of the Academy are given to Professor James R. Withrow for his timely and valuable lecture on "The Relation of War to Chemistry in America."

5. The Academy thanks the Local Committee and the Professors and Officers of the Ohio State University for providing convenient rooms for the general and sectional meetings and for their efforts in ministering to the comfort of all members in attendance.

6. The Secretary of the Academy, Professor E. L. Rice, deserves much credit for making detailed arrangements for this successful meeting, although other duties have necessitated his absence from the State.

E. L. MOSELEY,
L. B. WALTON,
C. G. SHATZER,
Committee.

Section for Physiology, Anatomy, Bacteriology and Pathology

A petition, signed by sixteen members, was presented, requesting the Academy to establish a new section for Physiology, Anatomy, Bacteriology, and Pathology—the exact name of the section to be determined later.

The petition was granted; and a vice-president and representative upon the Editorial Board of the Ohio Journal of Science were elected for the new section.

Constitution and By-Laws

The Acting President was instructed to appoint a committee of three to codify the Constitution and By-Laws. This committee was requested to consider the desirability of lengthening the terms of office of the president and secretary. (This action to be interpreted as notice of amendment, so that definite action may be taken at the next meeting.)

The Acting President appointed the following committee: Secretary E. L. Rice, ex-officio; F. C. Blake, Frank Carney.

The Academy directed the Executive Committee to print a new edition of the Constitution and By-Laws.

Time Limit for Papers

It was voted by the Academy that, in case titles of papers are sent in without specification of the time needed, a time limit of five minutes shall be set by the Program Committee.

Adjournment

The meeting adjourned without determining the place of the next meeting.

SCIENTIFIC SESSIONS

The complete scientific program of the meeting follows:

Presidential Address

Some Aspects of Present Day Biological Unrest, F. O. GROVER
(Omitted because of the absence of the President)

Lectures

The Relation of War to Chemistry in America,

JAMES R. WITHROW

Recent Explorations of Mount Katmai, Alaska,

ROBERT F. GRIGGS

Papers

1. Eskers in the Dayton Area. 20 min. (Lantern).....AUG. F. FOERSTE
2. The Preservation and Utilization of Wild Life in Ohio. 20 min.
HERBERT OSBORN
3. The Anatomy of an Eight-Legged Pig. 15 min. (Lantern),
STEPHEN R. WILLIAMS
4. The Origin of the "Reserve Cells" (Neoblasts) in the Regeneration of
Tubifex. 15 min. (Lantern).....F. H. KRECKER
5. Prospective and Retrospective Methodology in relation to the Problem
of Evolution. 15 min. (Lantern).....L. B. WALTON
6. Mutations by Interference:—A Study in Heredity. 12 min...A. B. PLOWMAN
7. Drainage Developments in Southeastern Ohio. 20 min...GEO. D. HUBBARD
8. Furs in the Wild and in the Shop. 20 min.....KATHARINE DOORIS SHARP
9. A Suggested Method for the Distinctive Description of Dipterous
Larvæ. 7 min.....C. L. METCALF
10. Additional Records and New Species of Ohio Homoptera. 10 min.
HERBERT OSBORN
11. Some New or Interesting Insect Predators. 10 min.....C. L. METCALF

12. Notes on the Protista:—(a) A New Species of Eutreptia; (b) A New Classification of the Protista. 10 min.....L. B. WALTON
13. The Remains of the Porcupine found in an Ohio Prehistoric Village Site. 8 min.....WM. C. MILLS
14. Indians of Licking County and Earthworks. 10 min.....H. A. ALBYN
15. Suggestions for the Making of a Key to the Seeds and Seed-like Fruits of Ohio Plants. 10 min.....JOHN H. SCHAFFNER
16. Ray Tracheids of Conifers. 7 min.....FRED A. DETMERS
17. The Nature of Sexual Hereditary Expression in the Sporophyte. 10 min.
JOHN H. SCHAFFNER
18. The Correlation of the Niagara Formations of Ohio, Indiana and Kentucky. 10 min.....AUG. F. FOERSTE
19. Pottsville and Allegheny Limestones in Muskingum County, Ohio. 15 min.....WILBER STOUT
20. Further Data on the Maxville Limestone. 5 min.....G. F. LAMB
21. Bearing of the Glacial Period on Theories of Evolution. 10 min.
G. FREDERICK WRIGHT
22. Some Glacial Features in Central Ohio. 5 min.....G. F. LAMB
23. Some Segments of the Maumee Shoreline near Columbus Grove, Ohio. 10 min. (Lantern).....FRANK CARNEY
24. A Physiographic Map of North America. 15 min.....W. N. THAYER
25. The Nature of *Beatricea undulata*. 5 min.....W. H. SHIDELER
26. Symposium on Modern Physics:—
A. Hall Effects in Metals and Alloys,
PROFESSOR A. W. SMITH, Ohio State University
B. Magnetostriction and its Bearing on Magnetic Theories,
PROFESSOR SAMUEL R. WILLIAMS, Oberlin College
C. A Review of Recent Work in X-Rays,
PROFESSOR S. J. M. ALLEN, University of Cincinnati
27. Spermatogenesis of *Branchipus vernalis*. 7 min.....ROLLO C. BAKER
28. Origin of Pre-Auditory Ganglia in *Rana*. 7 min.....RALPH A. KNOUFF
29. The Origin of Cartilage from Ectoderm in the Urodeles. 10 min.
F. L. LANDACRE
30. Amphibian Blood Transfusion. 10 min.....R. A. BUDINGTON
31. Observation on the Cytology of the Exudation seen in Lacunar Tonsilitis. 10 min.....HAZEL C. CAMERON
32. A Contribution to the Origin of the Macrophages seen in the Exudation in Pneumonia accompanying Typhoid Fever. 10 min...CARL CLARON HUGGER
33. The Occurrence of Eosinophilic Leucocytes and the Granule Cells of Paneth in the Vermiform Appendix of Man. 5 min.....JAMES H. WARREN
34. A Study of the Incidence of Pathological Conditions of the Thyroid Gland among Dogs in the City of Columbus. 10 min. (Lantern),
C. I. REED
35. Nephroblastic Tumors in Rabbits. 10 min. (Lantern)....ERNEST SCOTT
36. Notes on the Formation of Giant Cells in Tumors. 5 min.
JONATHAN FORMAN
37. Mudballs and Mudflows in the Ordovician Rocks in the Vicinity of Cincinnati. 10 min. (Lantern).....WALTER H. BUCHER

38. Intraformational Pebbles of the Ordovician and Silurian Formations of Ohio. 10 min.....AUG. F. FOERSTE
39. Conditions of Deposition in Devonian and Pennsylvania Times. 10 min.
LEWIS G. WESTGATE
40. The Weathering of Wisconsin Gravels in the Little Miami Valley near Cincinnati, Ohio. 10 min.....WALTER H. BUCHER
41. Some More of the Saluda Question. 10 min.....W. H. SHIDELER
42. Lake Abram. 3 min. (Opaque Projection).....WESLEY N. SPECKMAN
43. Concretionary Forms in Greenfield Limestone. 10 min.....C. W. NAPPER
44. Natural Gas in Ohio. 10 min.....JOHN BOWNOCKER
45. The Radioactivity of Smoke. 10 min.....S. J. M. ALLEN
46. Physical Factors concerned in the Measurement of Blood Pressure.
15 min. (Lantern).....CLYDE BROOKS
47. The Inheritance of Spotting in Dutch Rabbits. 20 min. (Lantern).
H. D. FISH
48. Unconformity between the Mississippian and Pennsylvanian in the Grand River at Parkman, Ohio. 10 min.....GEO. H. COLTON

Demonstrations

1. A Freak *Leptinotarsa decemlineata*.....C. L. METCALF
2. Mudballs and Pebbles from the Ordovician Rocks of the Vicinity of Cincinnati, illustrating Paper 37.....WALTER H. BUCHER
3. Pictures and Specimens to illustrate Paper 40, on the Weathering of Wisconsin Gravels.....WALTER H. BUCHER

LEWIS G. WESTGATE,
Acting Sec'y during Meeting,
EDWARD L. RICE,
Secretary.

Date of Publication, November 30, 1917.